

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)
2. (Original) An AM neighboring interference removing circuit for removing AM neighboring interference of an AM receiver, comprising:
 - a first local oscillator for generating an oscillation output having a frequency of f_{p1} ;
 - a second local oscillator for generating an oscillation output having a frequency of f_{p2} ;
 - a first multiplier for multiplying an AM stereo modulation wave desired to be received, by the oscillation output from said first local oscillator;
 - a second multiplier for multiplying the AM stereo modulation wave desired to be received, by the oscillation output from said second local oscillator;
 - a first low-pass filter for removing high frequency components contained in an output of said first multiplier;
 - a second low-pass filter for removing high frequency components contained in an output of said second multiplier;
 - a subtractor for subtracting an output of said second low-pass filter from an output of said first low-pass filter; and
 - a low-pass filter for receiving an output of said subtractor and having a cut-off frequency of $f_c/2$,wherein f_c is a carrier frequency of an interference AM modulation wave causing neighboring interference, $f_{p1} > f_{p2}$, and $f_{p1} - f_c = f_c - f_{p2}$.

3. (Original) An AM neighboring interference removing circuit for removing AM neighboring interference of an AM receiver, comprising:

a first local oscillator for generating an oscillation output having a frequency of $(fp1 + fa)$;

a second local oscillator for generating an oscillation output having a frequency of $(fp2 - fa)$;

a third local oscillator for generating an oscillation output having a frequency of $(fp2 + 3fa)$;

a first multiplier for multiplying an AM stereo modulation wave desired to be received, by the oscillation output from said first local oscillator;

a second multiplier for multiplying the AM stereo modulation wave desired to be received, by the oscillation output from said second local oscillator;

a third multiplier for multiplying the AM stereo modulation wave desired to be received, by the oscillation output from said third local oscillator;

a first low-pass filter for removing high frequency components contained in an output of said first multiplier;

a second low-pass filter for removing high frequency components contained in an output of said second multiplier;

a third low-pass filter for removing high frequency components contained in an output of said third multiplier;

a subtractor for subtracting outputs of said second and third low-pass filters from an output of said first low-pass filter; and

a band-pass filter for receiving an output of said subtractor and having a band-pass frequency in a range from $(fc/2 - fa)$ to $(fc/2 + fa)$,

wherein fc and $(fc + 2fa)$ are carrier frequencies of interference AM modulation waves causing neighboring interference, being lower and higher by a frequency fa from an AM carrier frequency of the AM stereo modulation wave desired to be received, $fp1 > fp2$, and $fp1 - fc = fc - fp2$.